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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/713,065	11/17/2003	Kia Silverbrook	ZG176US	9917

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SILVERBROOK RESEARCH PTY LTD  
393 DARLING STREET  
BALMAIN, 2041  
AUSTRALIA

EXAMINER
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HUFFMAN, JULIAN D

ART UNIT	PAPER NUMBER
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2853

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/713,065	<b>Applicant(s)</b> SILVERBROOK, KIA	
	<b>Examiner</b> Julian D. Huffman	<b>Art Unit</b> 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2-8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11/12/03 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 10/129434.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/12/03</u> | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 1-8 are objected to because of the following informalities:

In claim 1, a printhead assembly is claimed.

Claims 2-8 refer to the support structure of claim 1. However, a support structure is never claimed in claim 1. Thus the phrase support structure lack antecedent basis.

Additionally, in claim 1, the word "an" should be inserted in line 2 between the words "from" and "odd".

Applicant is reminded that if only a support structure were claimed in claim 1, the dependent claims directed towards the printhead modules would be objected to since the modules are not a part of the support structure. Applicant may wish to claim the printheads and their supporting structure.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claim 1 rejected under 35 U.S.C. 102(a) as being anticipated by Sakai et al. (U.S. 5,894,316).

Sakai et al. disclose a printhead assembly comprising:

an elongated beam (fig. 1, element 1) formed from odd number of layers, there being a pair of outer layers (3, 4) symmetrically disposed about and laminated to a core (2), the coefficient of thermal expansion of the core and the outer layers providing a coefficient of expansion, in the beam, substantially equal to that of silicon (column 6, lines 8-13, the layer 2 is formed of silicon, the layer 4 is formed from glass and has a CTE similar to silicon and the layer 3 is formed from silicon, therefore since the constituents have a CTE similar to that of CTE, the unit structure has a CTE similar to that of silicon).

The structure shown in fig. 1 of Sakai et al. is a printhead, though applicant's invention is directed towards a support beam for a printhead, the claims recite a printhead assembly and the structure of Sakai et al. is equivalent to a printhead assembly.

#### ***Allowable Subject Matter***

4. Claims 2-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten to overcome the objections above and if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

**Conclusion**

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. 5,528,272 to Quinn et al. disclose a support bar for printhead modules, the bar does not include the odd layers disposed around a center layer. U.S. 6,250,738 to Waller et al. disclose a mulilayered support structure in fig. 4, however the support structure has an even number of layers (6).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julian D. Huffman whose telephone number is (571)272-2147. The examiner can generally be reached Monday through Friday from 9:00 a.m. to 5:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier, can be reached at (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



JH

August 19, 2004



**Thinh Nguyen**  
**Primary Examiner**  
**Technology Center 2800**